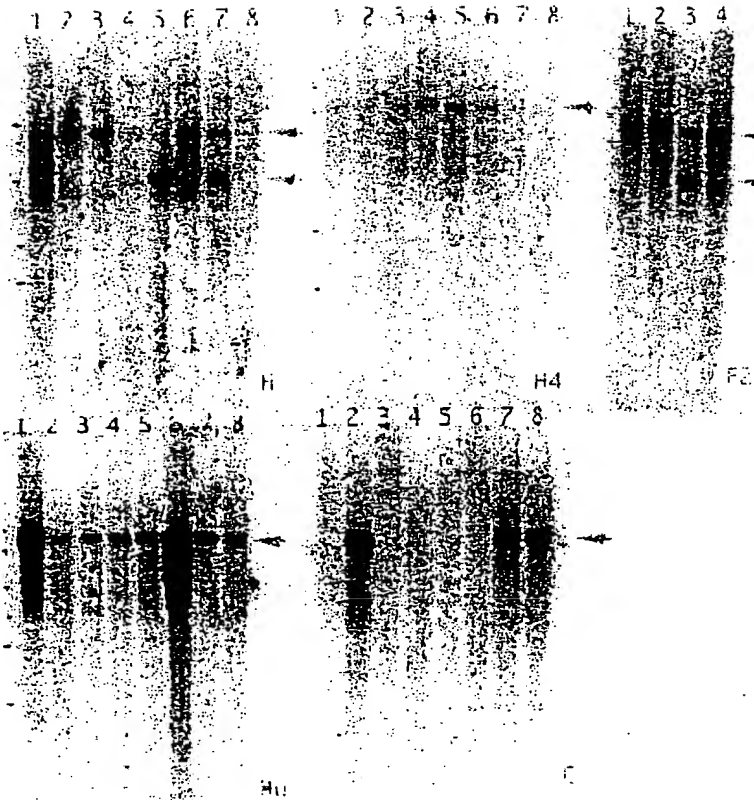


5 / 2 6

~~Figure 5~~

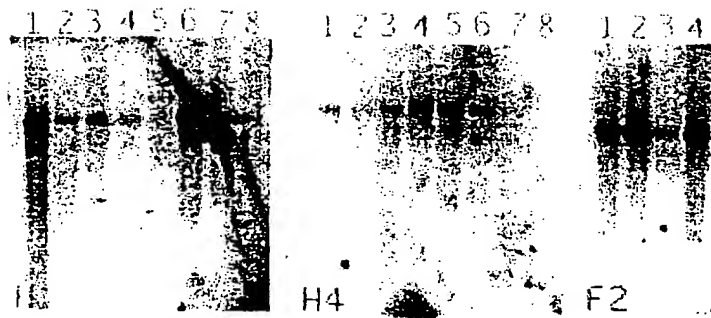
Fig. 6



100

Fig. 5

1983 - 1984



921 ATCP IIPGCETTIEISKGR TGLGLSIVGGS DTL LGAFIIHEVYEEGAACK 970
 |||
 1 ATCP IIPGCETTIEISKGR TGLGLSIVGGS DTL LGAFIIHEVYEEGAACK 50

971 DGRLWAGDQ ILEVNGIDL RKATHDEAINVLRQTPQRVRLTLYRDEAPYKE 1020
 |||
 51 DGRLWAGDQ ILEVNGIDL RKATHDEAINVLRQTPQRVRLTLYRDEAPYKE 100

1021 EEVCDLT IELQKKPGKGLGLSIVGKRNDTG VVSDIVKGGIADPDGRLI 1070
 |||
 101 EEVCDLT IELQKKPGKGLGLSIVGKRNDTG VVSDIVKGGIADADGR LM 150

1071 QGDQ ILLVNGEDVRNASQEAVAALLKCSLGT VTLLEVGR IKAGPFHSERRP 1120
 |||: |||
 151 QGDQ ILMVNGEDVRNATQEAVAALLKCSLGT VTLLEVGR IKAGPFHSERRP 200

1121 SQT SQVSEGLSSFTFPLSGSSTSESLESSSKKNALASEIQGLRTVEMKK 1170
 ||
 201 SQSSQVSEGLSSFTFPLSGSSTSESLESSSKKNALASEIQGLRTVEMKK 250

1171 GPTDSLGI SIAGGVGSP LGDVPIFIAMHPTGVAAQTQKL RVGDRIVTIC 1220
 |||
 251 GPTDSLGI SIAGGVGSP LGDVPIFIAMHPTGVAAQTQKL RVGDRIVTIC 300

1221 GTSTEGM THTQAVNLLKNASGSIEMQV VAGGDVSVVTGHHQEPASSSLSF 1270
 |||
 301 GTSTEGM THTQAVNLLKNASGSIEMQV VAGGDVSVVTGHHQEPASSSLSF 350

1271 TGLTSTSI FQDDLGP PQCKSITLERGPDGLGFSIVGGYGSPHGDLPIYVK 1320
 |||
 351 TGLTSSSI FQDDLGP PQCKSITLERGPDGLGFSIVGGYGSPHGDLPIYVK 400

1321 TVFAKGAASEDGRLKRGDQIIAVNGQSLEGVTHEEAVAILKRTKGTVTLM 1370
 |||
 401 TVFAKGAASEDGRLKRGDQIIAVNGQSLEGVTHEEAVAILKRTKGTVTLM 450

1371 VLS 1373
 |||
 451 VLS 453

FIG. 2

1	MVCCRRTVPTTQSELDLDCDIJELTEKPHVDLGEFIGSSETEDPVLAM	50	401	GLGMIVRSIJHGGAI SRDGRAIGDCILSINEESTISVTNAQARAMLRRH	450
620	MVCCRRTVPTALSEVDSLDIHOLELTKPHIDLGEFIGSSETEDPVLAM	669	1015	GLGVIVRSIJHGGAI SRDGRAIVGDCILSINEESTISLTNAQARAMLRRH	1064
51	TDAGQSTEEVQAPLAWWEAGIQHIELEKSGKGLGFSILDYQDPIDPASTV	100	451	SLIGPDIKITYVPAEHLEEFKISLGGQSGRVMAIDIFSSYTGRIPELPE	500
670	SDVDQNAEEIQTLAWWEAGIQHIELEKSGRGLGFSILDYQDPIDPANTV	719	1065	SLIGPDIKITYVPAEHLEEFKISLGGQAGGIMALDIFSSYTGRIPELPE	1114
101	IIRSLVPGGIAEKDGRLLPGDRLMFVNDVNLNSSLLEAVEALKGAPSG	150	501	REEGEGEESELQNTAYSNWNP RRVELWREPSKLSGISVGGRGMSRLS	550
720	IVIRSLVPGGIAEKDGRLLPGDRLMFVNDINLENSTLEEAVEALKGAPSG	769	1115	REEGEGEESELQNAAYSSWSQPRRVELWREPSKLSGISVGGRGMSRLS	1164
151	TVRIGVAKPLPLSPEEGYVSAKEDSFLYPHPSCEEAGLADKPLFRADLAL	200	551	NGEVMRGIFIKHVLEDSPAGKNGTLKPGDRIVE	583
770	MVRIGVAKPLPLSPEEGYVSAKEDTFLCSPHICKEMGLSDKALFRADLAL	819	1165	NGEVMRGIFIKHVLEDSPAGKNGTLKPGDRIVEVDGMDLROASHEQAVEA	1214
201	VGINDADLVDESTFESPSPENDSIYSTOASILSLHGSSCGDLNHYGSSL	250	584	...APSQSESEPEKAPLCVPPPPPSAFAMGSDHTQSSASKISQVDKE	630
820	IDTPDAESVAESRFESQFSPDNDVYSTOASVLSLHDGACSDGMNYPSSL	869	1265	SDKAPSQSESESEKATILCSVPSSSPSVFSEMSSDYAQP SATTVAEDEKE	1314
251	PSSPPKDVIENTSCDPVLDLHMSLEELYTQNLLEEQDENTPSVDISMCPAS	300	631	DEFGYSWKNIERYGYTLTGELHMI ELEKHSGLSGLAGNKDRSRMSVFI	680
870	PSSPPKDV.TNSSDLVLGLHLSLEELYTQNLQHQHAGSPPTDMSPAATS	918	1315	DEFGYSWKNIQERYGYTLTGQLHMI ELEKHSGLSGLAGNKDRTRMSVFI	1364
301	GFTINDYTPANAIEQQYECENTIVMTESHLPSEVISSAELPSVLPSAGK	350	681	VGIDPNGAAGKDRGRQLIADELLEINGQILYGRSHQNASSI IKCAPSKVKI	730
919	GFTVSDYTPANAVEQKYECANTVAWTPSQLPSG.LSTTELAPALPAVAPK	967	1365	VGIDPTGAAGRDRGRQLIADELLEINGQILYGRSHQNASSI IKCAPSKVKI	1414
351	GSEHILLEOSSLACNAECVMLQNVSKESFERTINIAGKNSSLGHTVSANKD	400	731	IFTRNKDAVNQMAVCPGNAVEPLPSNSENLOKNETEPTVTTSDAAVDLSS	780
968	...YLIEGSSLVSDAESVTLOMSQEAFAERTVTIAGKSSSLGHTVSANKD	1014	1415	IFTRNADAVNQMAVCPGSAADPLPSTSESPQNKVEPSITTSASAVDLSS	1464

FIG. 3

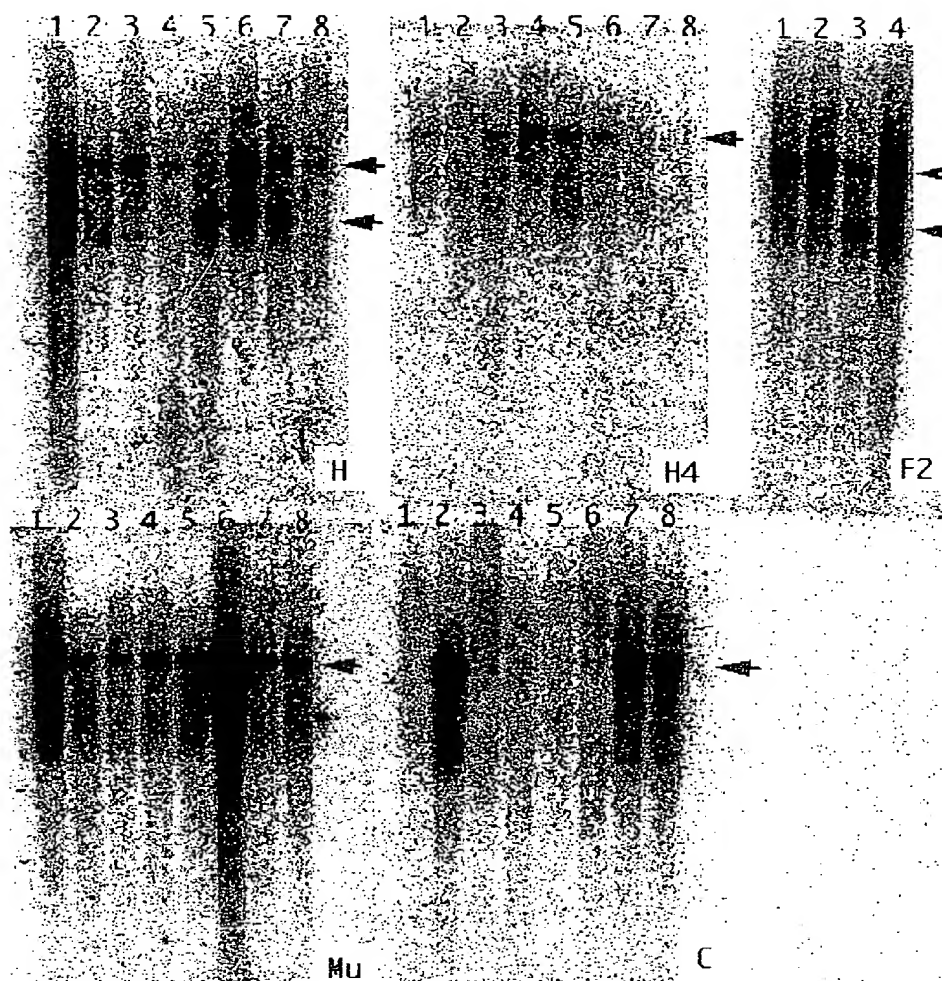


FIG. 6

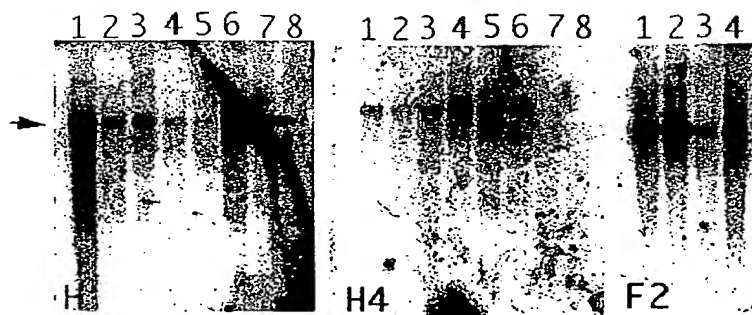
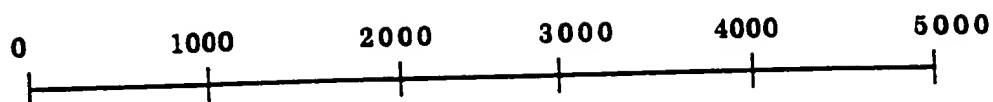


FIG. 5

Probes

Nde1.2kb-#1

BamHI-XbaI



1 292 4410 4880
(amino acid 1) (amino acid 1373)

cDNA clones

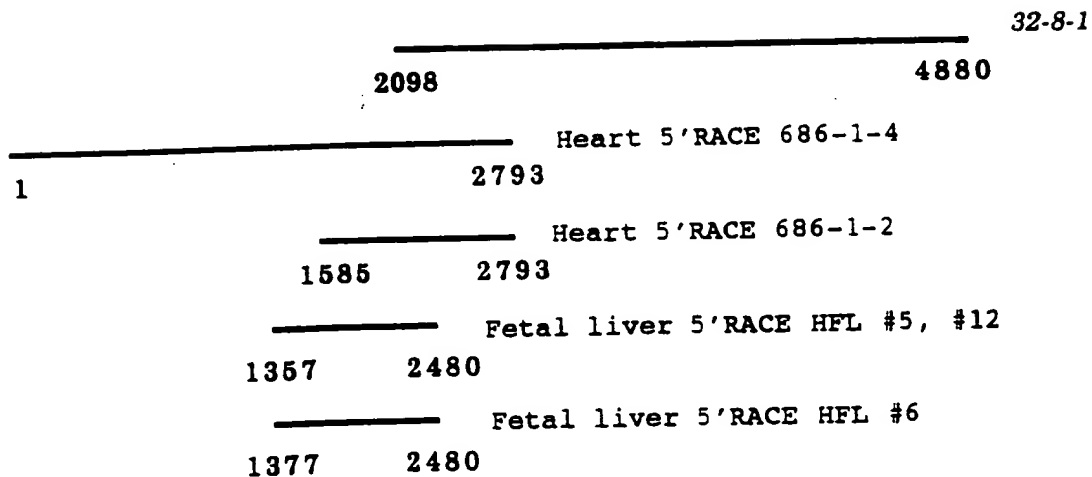


FIG. 7

50

1

PDZ-E	AGIQHIELE.	KGSKGLGFSI	LDYQD.....	PIDPASTVII	IRSLVPGGIA
PDZ-F	QNVSKESFER	TINIAKGNSS	LGMTV.....	SANKDGLGMI	VRSI IHGGAI
PDZ-G	NQPRRVELWR	EPSKSLGISI	VGGRGMG SRL	SNGEVMRGIF	IKHVLEDSPA
PDZ-H	GELHMIELEK	GHS. GLGLSL	AGNKD.....	RSR. M. .SVF	IVGIDPNGAA
PDZ-I	KNVQHLELPK	DQG. GLGIAI	SEEDTLSGVI	IKSLTEHGVA
PDZ-J	GCETTIEISK	GRT. GLGLSI	VGGSD.....	TLL. G. .AFI	IHEVYEEGAA
PDZ-K	CDTLTIELQK	KPGKGLGLSI	VGKRN.....DTGVF	VSDIVKGGIA
PDZ-L	QGLRTVEMKK	GPTDSLGISI	AGGVG.....	SPL. GDVPIF	IAMMHPTGVA
PDZ-M	PQCKSITLER	GP. DGLGFSI	VGGYG.....	SPH. GDLPIY	VKTVFAKGAA

96

51

PDZ-E	EKDGRLLPGD	RLMFVNDVNL	ENSSLEEAVE	ALKGAPSGTV	RIGVAK
PDZ-F	SRDGRIAIGD	CILSINEEST	ISVTNAQARA	MLRRHSLIGP	DIKITY
PDZ-G	GKNGTLKPGD	RIVEAPSQSE	SEPEKAPLCS	VPPPPPSAFA	EMGSDH
PDZ-H	GKDGRLLQIAD	ELLEINGQIL	YGRSHQNASS	IIKCAP. SKV	KIIFIR
PDZ-I	ATDGRLLKVG	QILAVDDEIV	VGYPKIEKFIS	LLKTAKM. TV	KLTIHA
PDZ-J	CKDGRLLWAGD	QILEVNGIDL	RKATHDEAIN	VLRQTP. QRV	RLTLYR
PDZ-K	DPDGRLLIQGD	QILLVNGEDV	RNAS. QEAVA	ALLKCSLGTV	TLEVGR
PDZ-L	AQTQKL RVGD	RIVTICGTST	EGMTHTQAVN	LLKNAS. GSI	EMQVVA
PDZ-M	SEDGRLLKRGD	QIIAVNGQSL	EGVTHEEAVA	ILKRTK. GTV	TLMVLS

FIG. 8

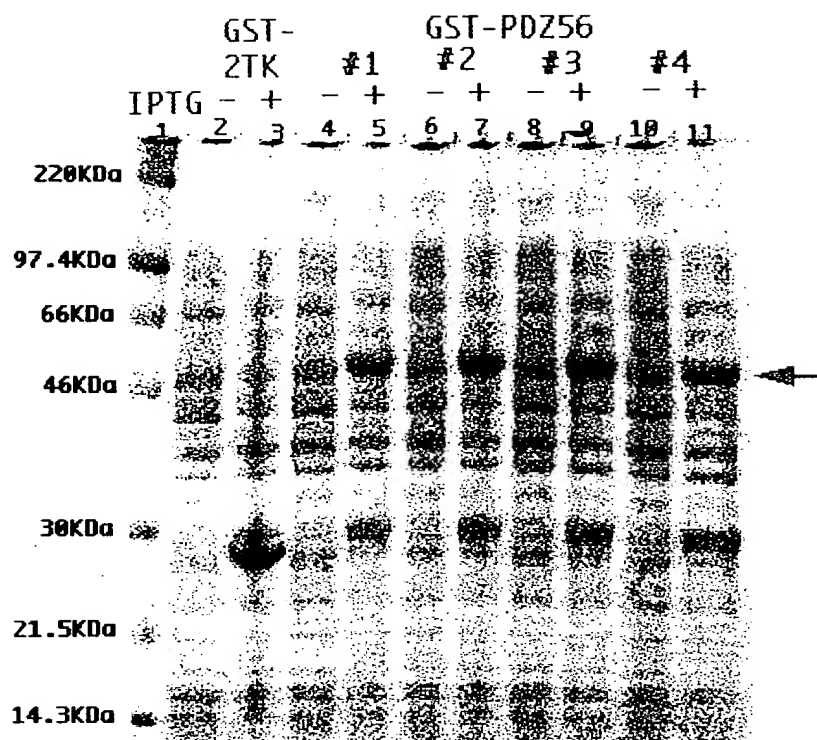


FIG. 9

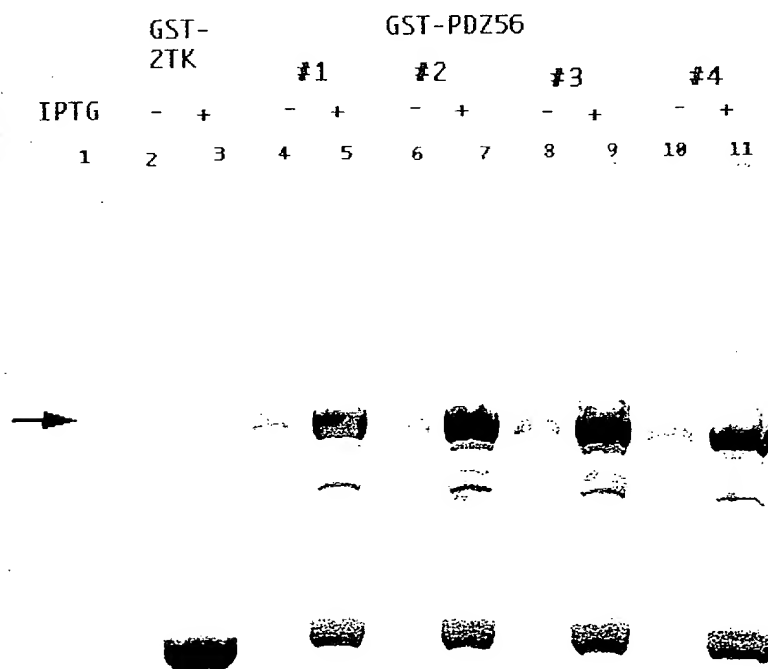


FIG. 10

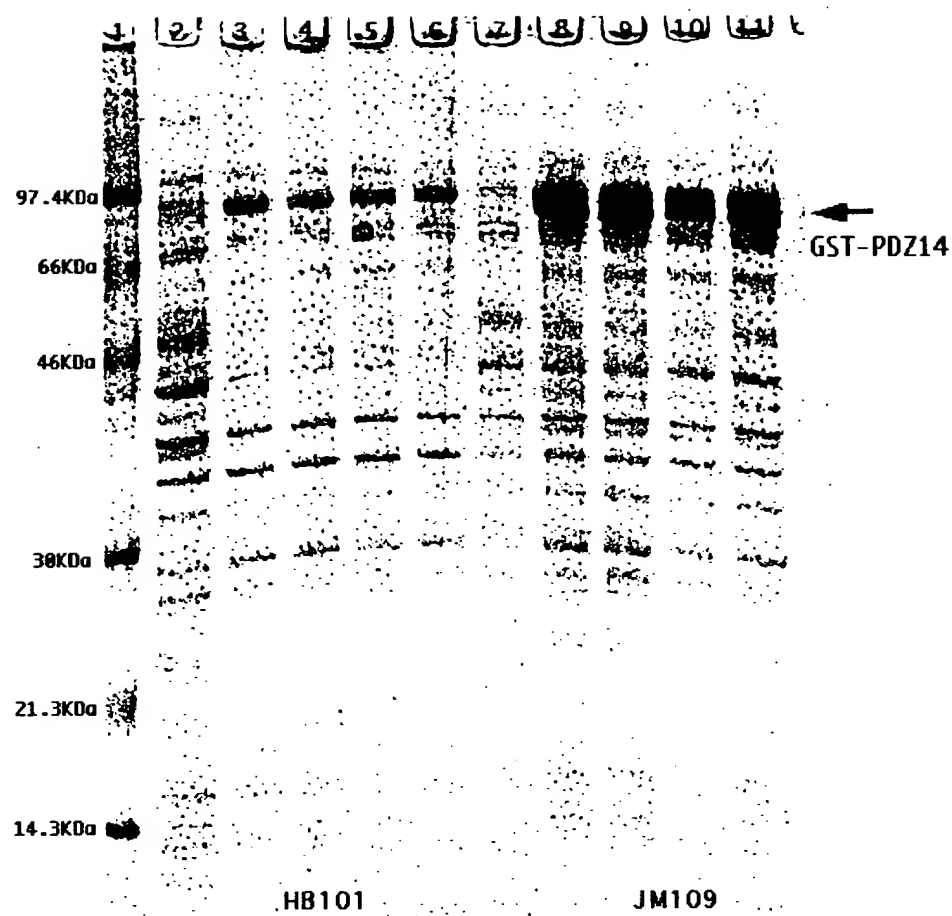


FIG. 11

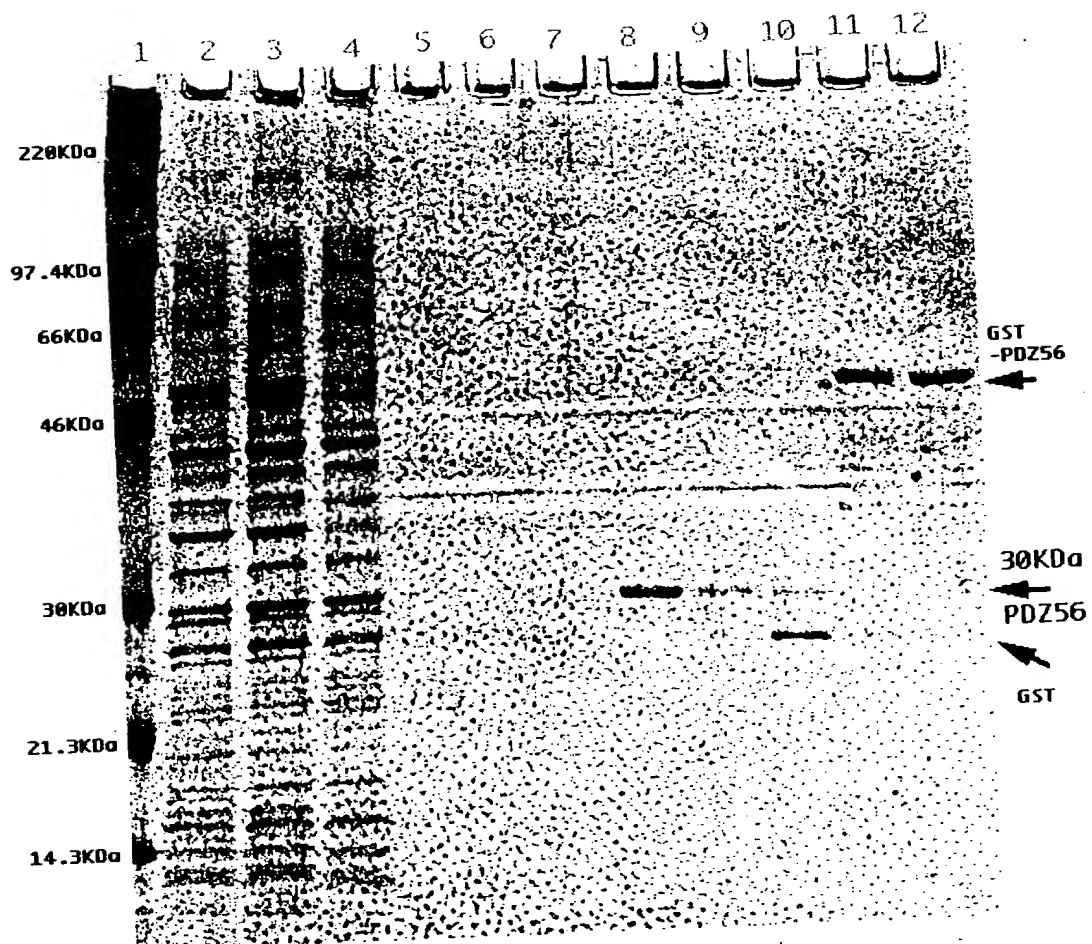


FIG. 12

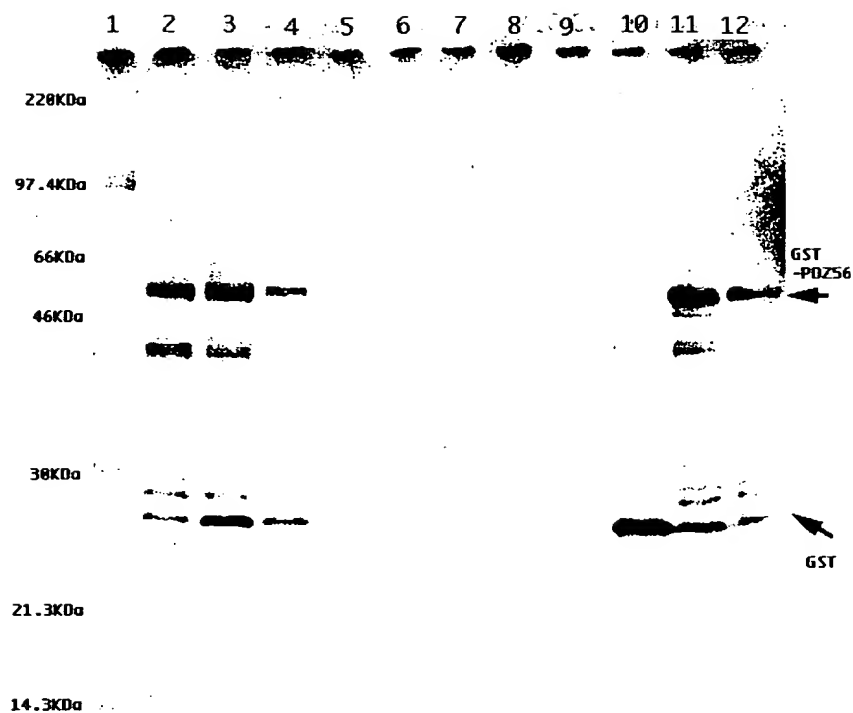


FIG. 13

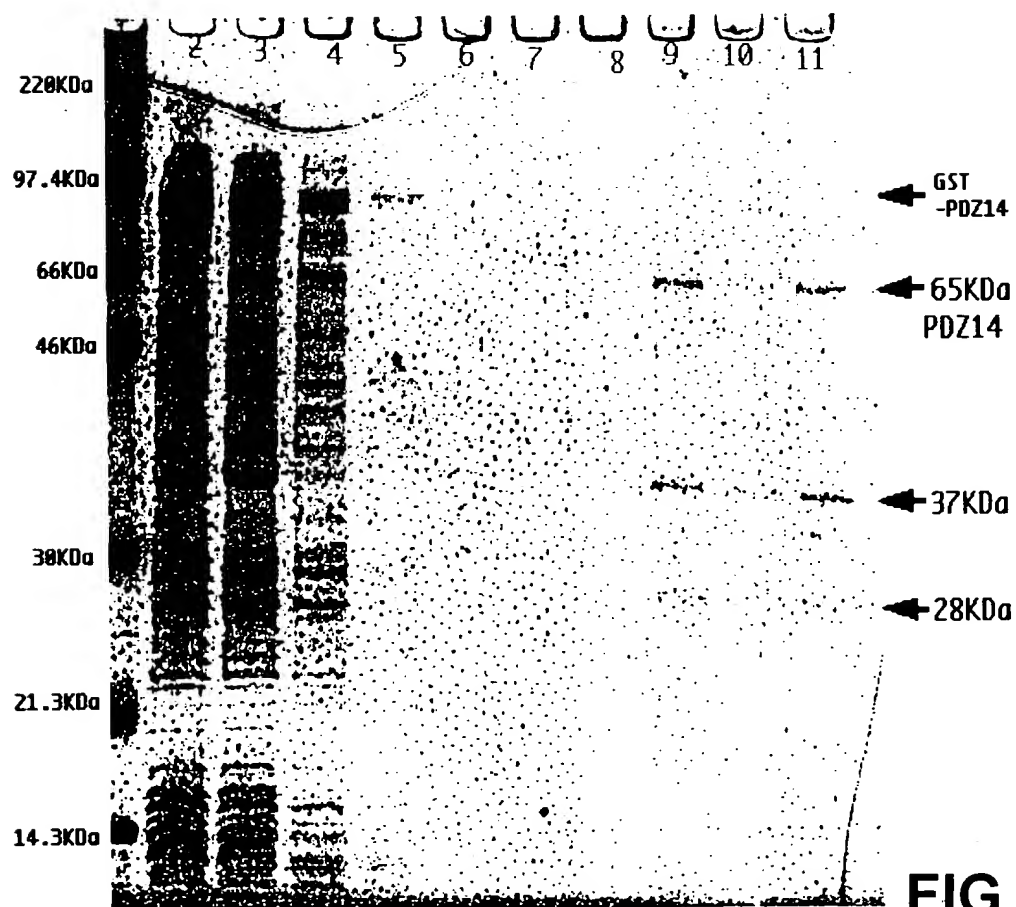


FIG. 14

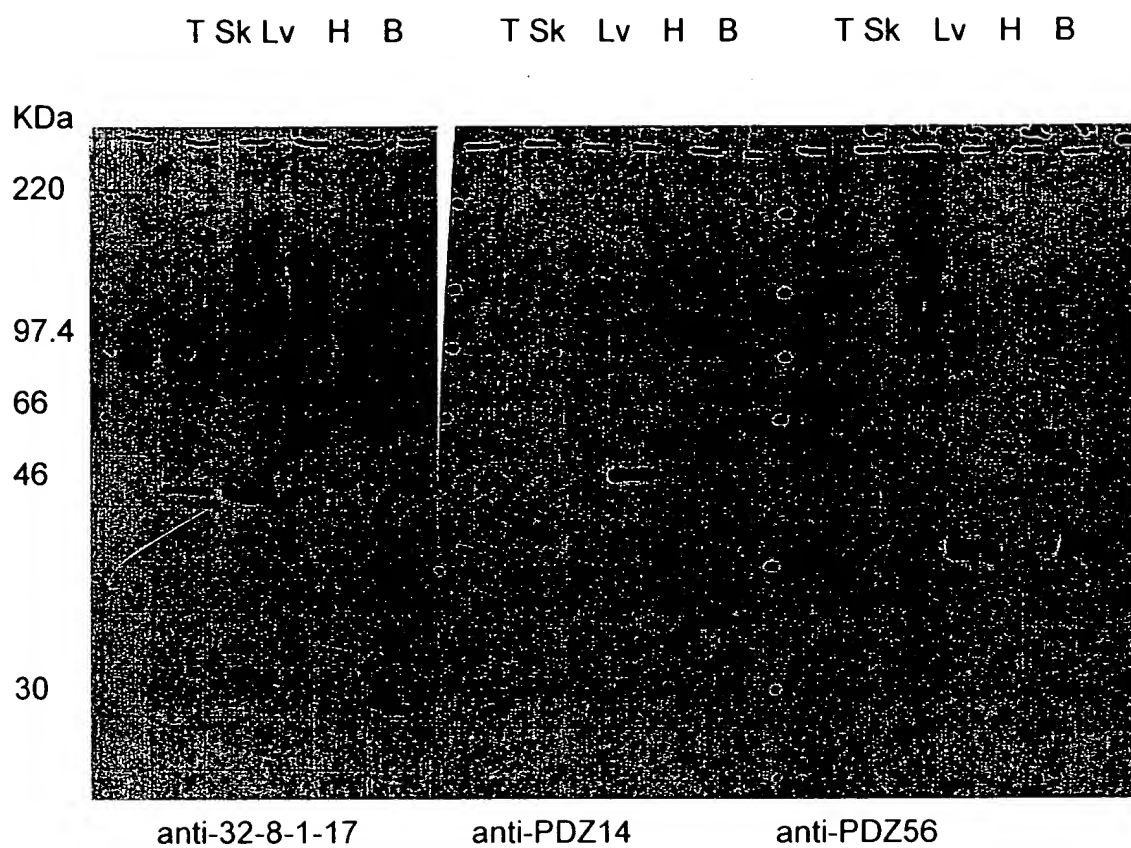


FIG. 15

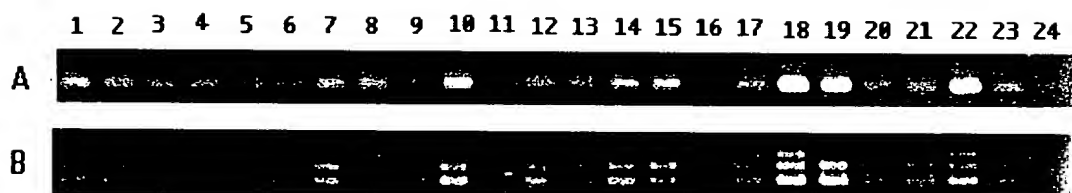


FIG. 16

1	50		351	400
FI1750	TTCTTTCTGT GCTACCCGAT TCAGCTGGAA AGGGCTCTGA GTACCTGCTT	FI1750	ATAAAATTA CTTATGTGCC TGCAGACAT TTGGAAGAGT TCAAAATAG	
FI1850	TTCTTTCTGT GCTACCCGAT TCAGCTGGAA AGGGCTCTGA GTACCTGCTT	FI1850	ATAAAATTA CTTATGTGCC TGCAGACAT TTGGAAGAGT TCAAAATAG	
FI1950	TTCTTTCTGT GCTACCCGAT TCAGCTGGAA AGGGCTCTGA GTACCTGCTT	FI1950	ATAAAATTA CTTATGTGCC TGCAGACAT TTGGAAGAGT TCAAAATAG	
51	100		401	450
FI1750	GAACAGAGCT CCCTGGCCTG TAATGCTGAG TGTGTCATGC TTCAAAATGT	FI1750	CTTGGGACAA CAATCTCGAA GAGTAATGCC ACTGGATATT TTTTCTTCAT	
FI1850	GAACAGAGCT CCCTGGCCTG TAATGCTGAG TGTGTCATGC TTCAAAATGT	FI1850	CTTGGGACAA CAATCTCGAA GAGTAATGCC ACTGGATATT TTTTCTTCAT	
FI1950	GAACAGAGCT CCCTGGCCTG TAATGCTGAG TGTGTCATGC TTCAAAATGT	FI1950	CTTGGGACAA CAATCTCGAA GAGTAATGCC ACTGGATATT TTTTCTTCAT	
101	150		451	500
FI1750	ATCTAAGAA TCCTTTTGAAA GGAATATTAA TATAGCAAAA GGCATTTCTA	FI1750	ACACTGGCAG AGACATTCCA GAATTACCAG AGCGAGAAGA GCGAGAGCGT	
FI1850	ATCTAAGAA TCCTTTTGAAA GGAATATTAA TATAGCAAAA GGCATTTCTA	FI1850	ACACTGGCAG AGACATTCCA GAATTACCAG AGCGAGAAGA GCGAGAGCGT	
FI1950	ATCTAAGAA TCCTTTTGAAA GGAATATTAA TATAGCAAAA GGCATTTCTA	FI1950	ACACTGGCAG AGACATTCCA GAATTACCAG AGCGAGAAGA GCGAGAGCGT	
151	200		501	550
FI1750	GCCTAGCAAT GACAGTTAGT GCTAATAAAG ATGGCTTGGG GATGATCGTT	FI1750	GAAGAAGCG AACTTCMAAA CACAGCATAT AGCAATTGCA ATCAGGCCAG	
FI1850	GCCTAGCAAT GACAGTTAGT GCTAATAAAG ATGGCTTGGG GATGATCGTT	FI1850	GAAGAAGCG AACTTCMAAA CACAGCATAT AGCAATTGCA ATCAGGCCAG	
FI1950	GCCTAGCAAT GACAGTTAGT GCTAATAAAG ATGGCTTGGG GATGATCGTT	FI1950	GAAGAAGCG AACTTCMAAA CACAGCATAT AGCAATTGCA ATCAGGCCAG	
201	250		551	600
FI1750	CGAAGCATT TTCAATGGAGG TGCCATTAGT CGAGATGGCC GGAATGCCAT	FI1750	CGCGGTGGAA CTCTGGAGAG AACCAAGCAA ATCCTTAGGC ATCAGCATTG	
FI1850	CGAAGCATT TTCAATGGAGG TGCCATTAGT CGAGATGGCC GGAATGCCAT	FI1850	CGCGGTGGAA CTCTGGAGAG AACCAAGCAA ATCCTTAGGC ATCAGCATTG	
FI1950	CGAAGCATT TTCAATGGAGG TGCCATTAGT CGAGATGGCC GGAATGCCAT	FI1950	CGCGGTGGAA CTCTGGAGAG AACCAAGCAA ATCCTTAGGC ATCAGCATTG	
251	300		601	650
FI1750	TGCGGACTGC ATCTTGTCGA TTAATGAAGA GTCTACCATC AGTGTAAACCA	FI1750	TTGCTGGACG AGGGATGGGG AGTCGGCTAA GCAATGGAGA AGTCATGAGG	
FI1850	TGCGGACTGC ATCTTGTCGA TTAATGAAGA GTCTACCATC AGTGTAAACCA	FI1850	TTGCTGGACG AGGGATGGGG AGTCGGCTAA GCAATGGAGA AGTCATGAGG	
FI1950	TGCGGACTGC ATCTTGTCGA TTAATGAAGA GTCTACCATC AGTGTAAACCA	FI1950	TTGCTGGACG AGGGATGGGG AGTCGGCTAA GCAATGGAGA AGTCATGAGG	
301	350		651	700
FI1750	ATGCCCAGGC AGCAGCTATG TTGAGAAGAC ATTCTCTCAT TGGCCCTGAC	FI1750	GGCATTTTCA TCAACATGT TCTGGAAGAT AGTCCAGCTG GCAAAAATGG	
FI1850	ATGCCCAGGC AGCAGCTATG TTGAGAAGAC ATTCTCTCAT TGGCCCTGAC	FI1850	GGCATTTTCA TCAACATGT TCTGGAAGAT AGTCCAGCTG GCAAAAATGG	
FI1950	ATGCCCAGGC AGCAGCTATG TTGAGAAGAC ATTCTCTCAT TGGCCCTGAC	FI1950	GGCATTTTCA TCAACATGT TCTGGAAGAT AGTCCAGCTG GCAAAAATGG	

FIG. 17

	701				750
FH750	AACCTTGAAA	CCTGGAGATA	GAATCGTAGA	G	
FH850	AACCTTGAAA	CCTGGAGATA	GAATCGTAGA	GGTGGATGGA	ATGGACCTCA
FH950	AACCTTGAAA	CCTGGAGATA	GAATCGTAGA	GGTGGATGGA	ATGGACCTCA
	751				800
FH750					
FH850	GAGATGCAAG	CCATGAACAA	GCTGTGGAAG	CCATTCCGAA	AGCAGGCAAC
FH950	GAGATGCAAG	CCATGAACAA	GCTGTGGAAG	CCATTCCGAA	AGCAGGCAAC
	801				850
FH750					
FH850	CCTGTAGTCT	TTATGGTATA	GAGCTTTATT	ACAGACCAAG	G
FH950	CCTGTAGTCT	TTATGGTACA	GAGCATTATA	AACAGACCAA	GGAAATCCCC
	851				900
FH750					
FH850					
FH950	TTTGCCTTCC	TTGCTGCACA	ACCTTTACCC	TAAGTACAAC	TTCAGCAGCA
	901				950
FH750					GCACCCAGT
FH850					GCACCCAGT
FH950	CTAACCCATT	TGCTGACTCT	CTACAAATCA	ACGCCGACAA	GGCACCCAGT
	951	965			
FH750	CAGTCAGAGT	CAGAG			
FH850	CAGTCAGAGT	CAGAG			
FH950	CAGTCAGAGT	CAGAG			

FIG. 18

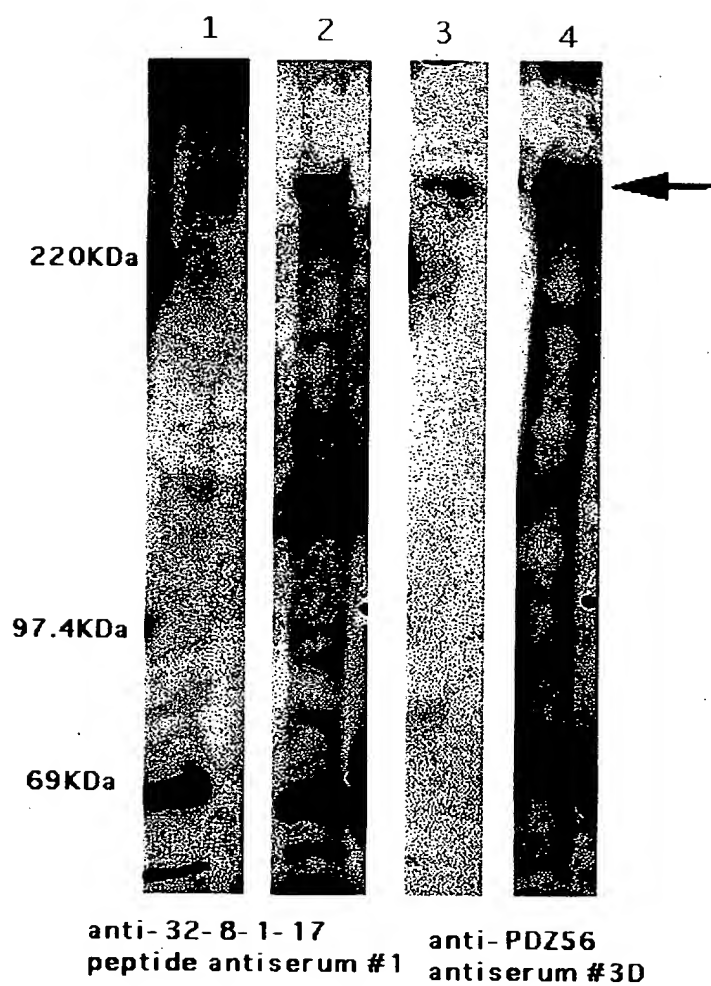


FIG. 19

1545 FISLLKATKATVKLTHIAENPDQAVPSAAGAASGEKKNSSQSLAVPQSG 1594
 2 FISLLKATKATVKLTHIAENPDQAVPSAAGAASGEKKNSSQSLAVPQSG 48

1595 SPEPESIRNTSRKSTPAIFASDPATCPIIPGCETTIEISKRTGLGLSIV 1644
 49 APDLEPIPSTSRKSTPAIFASDPATCPIIPGCETTIGVSKGTGLGLSIV 98

1645 GCSDTLLGAFTHIEVYECAACKDRLWAGDQILLEVNGIDLRKATHDEAI 1694
 99 GCSDTLLGAFTHIEVYECAACKDRLWAGDQILLEVNGIDLRKATHDEAI 148

1695 NVLRQTPQVRVRLTYRDEAPYKEEVCDTLTIE..LQKPKCKGLGLSIVG 1742
 149 NVLRQTPQVRVRLTYRDEAPYKEEVCDTLTIE..LQKPKCKGLGLSIVG 198

1743 KRNDTCVFVSDIVKCGIADPDGRLIQDQILLVNGEDVRNASQEAVAL 1792
 199 KRNDTCVFVSDIVKCGIADPDGRLIQDQILLVNGEDVRNASQEAVAL 248

1793 KCSLGTVTLEVRIRKAGPFISERRPQSQTQVSECSLSTFTPLSGSSTSE 1842
 249 KCSLGTVTLEVRIRKAGPFISERRPQSQTQVSECSLSTFTPLSGSSTSE 298

1843 SLESSKKNALASEIQCLRTVEKKGPTDSLSGLSIAGGVGSPGDPVPIFI 1892
 299 SLESSKKNALASEIQCLRTVEKKGPTDSLSGLSIAGGVGSPGDPVPIFI 348

1893 AAMIPFGVAAQTQKLRVCDRIVTICGTSTEGMTHTTQAVNLLKNALSGSIEW 1942
 349 AAMIPFGVAAQTQKLRVCDRIVTICGTSTEGMTHTTQAVNLLKNALSGSIEW 398

1943 QVVAGDVSVWTGHQEPASSLSFTGLTSTSIPODOLGPPQCKSITLDR 1992
 399 QVVAGDVSVWTGHQEPASSLSFTGLTSTSIPODOLGPPQCKSITLDR 448

1993 GPDGLGFSIVGGYCSPHCDLPYVKTVFAKGAASEDGRUKRGDQIIAYNG 2042
 449 GPDGLGFSIVGGYCSPHCDLPYVKTVFAKGAASEDGRUKRGDQIIAYNG 498

2043 QSLGCVTHIEEAVAILKRTKGTVTLAWLS 2070
 499 QSLGCVTHIEEAVAILKRTKGTVTLAWLS 526

FIG. 20

FIG. 20

1965

1618 ATCP1IPCCETTIEISKRTGLGLSIVGCSOTLLGAFIHEVYEECAACK 1667
|||||
1 ATCP1IPCCETTIEISKRTGLGLSIVGCSOTLLGAFIHEVYEECAACK 50

1668 DGRLLWAGDQILEVNCIDLKATIDEAINVLRQTPQRVRLTLRYDEAPYKE 1717
|||||
51 DGRLLWAGDQILEVNCIDLKATIDEAINVLRQTPQRVRLTLRYDEAPYKE 100

1718 EEVCUTLTIELQKPKCKGLGLSIVCKRNDTCVFVSDIVKGGIADPDGRLI 1767
|||||
101 EEVCUTLTIELQKPKCKGLGLSIVCKRNDTCVFVSDIVKGGIADADGRLM 150

1768 QCDQILLVNCEDVRNASQEAVALKCSLCTVTLEVCRIKACPFHSERRP 1817
|||||
151 QCDQILLVNCEDVRNATQEAVALKCSLCTVTLEVCRIKACPFHSERRP 200

1818 SQTSSQVSEGLSFTFPLSCSSTSESLESSKKNALASEIQGLRTVEAKK 1867
||.
201 SQTSSQVSEGLSFTFPLSCSSTSESLESSKKNALASEIQGLRTVEAKK 250

1868 GPTDSLGLSIAGGVCSPLDGVPFIAMMPTGVAAGTQKLRVCDRIVTIC 1917
|||||
251 GPTDSLGLSIAGGVCSPLDGVPFIAMMPTGVAAGTQKLRVCDRIVTIC 300

1918 GTSTEGMTTITQAVNLLKNASGSIEMQVWAGGDVSVVTGTHQEPASSLSF 1967
|||||
301 GTSTEGMTTITQAVNLLKNASGSIEMQVWAGGDVSVVTGTHQEPASSLSF 350

1968 TGLTSTSIQDLDLPPQCKSITLERCPDGLGFSIVGCGYCSFHCDLPITYK 2017
|||||
351 TGLTSSSIFQDLDLPPQCKSITLERCPDGLGFSIVGCGYCSFHCDLPITYK 400

FIG. 21

2018 TVFAKGAASEDGRLKRGDQIIAVNQSLEGVTHEEAVAILKRTKCTVTLM 2067
|||||
401 TVFAKGAASEDGRLKRGDQIIAVNQSLEGVTHEEAVAILKRTKCTVTLM 450

2068 VLS 2070
|||
451 VLS 453

FIG. 22

1 MLEATDKNRALIAERLQTKLRGCVANEDKLSLKSVLQSPFSQILS 50
 III IIIIII IIIIII IIIIII IIIIII IIIIII IIIIII IIIIII
 1 MLETIONKRALQAERLQSKLKERGVANEDKLSLKSVLQSPFSQILS 50
 51 LQTSVQQLKQVNIATSNI EYAVIHILSPAVIPTLQNESFLLSPNG 100
 IIII.IIIIII:II III I :II I I :I II.II IIII.II
 51 LQTSVQQLKQVNVATLATANADIAHTPQFSSATISNUQSESILLSPNC 100
 101 NLEALTCPGI.PIHNGKPAACDEFDQLIKNMAQGRIVEVFELLKPPCGGLG 149
 IIII:III I ..III:I IIII.IIIIII:IIIII IIII
 101 NLEATSGCAPPAKDCKPACEELDQLIKSMAQGRIVEIFELLKPPCGGLG 150
 150 FSWGLRSENGELGIFVQEIQECVAIRDGRLKETQILAINQALDQT 199
 IIIIII IIIIII IIIIII IIIIII IIIIII IIIIII IIIIII
 151 FSWGLRSENGELGIFVQEIQECVAIRDGRLKETQILAINQVLDQT 200
 200 ITHQQAISILQAKDVTQLVIARCSLPQLVSPIVSRSPSAASTISAHNP 249
 IIIIII IIIIII:IIIII III :II :IIIII:IIIII
 201 ITHQQAISILQAKDVTQLVIARCSLPQHSSPRI SRSPSAASTVSAHNP 250
 250 VTHQVETIELVNDOSGLGFIIGCKATGVIVKTI LPCGVADQHGRCLSCG 299
 IIII.IIIIII IIIIII IIIIII IIIIII IIIIII IIIIII
 251 THQVETIELVNDOSGLGFIIGCKATGVIVKTI LPCGVADQHGRCLSCG 300
 300 DHIIXITGDTDLAGASSEQAQVLRQCGNRVULMIARSAIEERTAPTALGI 349
 IIIIII IIIIII IIIIII IIIIII IIIIII IIII II.II
 301 DHIIXITGDTDLAGASSEQAQVLRQCGNRVULMIARCAVEETAPSSLCI 350
 350 TLSSSTPTPELRVDASTQKNEESETFDVELTKNVQGLGITIAGYIDKX 399
 IIII III I:IIIII IIIIII IIIIII IIIIII IIIIII
 351 TLSSS.TSTSEMRVDASTQKNEESETFDVELTKNVQGLGITIAGYIDKX 399

400 LEPSGIFVKSITKSSAVEHDCRIQICDQIIAVDGTNLQGTNQAVEVLR 449
 IIIIII IIIIII IIIIII IIIIII IIIIII IIIIII IIIIII
 400 LEPSGIFVKSITKSSAVEHDCRIQICDQIIAVDGTNLQGTNQAVEVLR 449
 450 HTCGTVLLTLARQKQAEAEIARSREDVTXADILSPVNASIIKENYKDED 499
 IIIII IIIII:I IIII: IIII IIII IIIII
 450 HTCGTVRLTLARQKQAEAEITSREDTAKDVLP.....AENYEKDEE 492
 500 FLSTRNTNILLPTEECCYPLLSAEIEEIEDAQKQEAALLTKWQRIINGIN 549
 II I.I.II IIIIII I:II II I IIIIII IIIIII
 493 SLSLRSTSI LPIEECCYPLLSTELEETDVQ.QEAALLTKWQRIINGIN 541
 550 EIVVAIVSKFSENSGLGISLEATVGHFIRSVLPCEGPGVGHSGKLFSGOEL 599
 IIIIII IIIIII IIIIII IIIIII IIIIII IIIIII IIIIII
 542 EIVVAIVSKFSENSGLGISLEATVGHFIRSVLPCEGPGVGHSGKLFSGOEL 591
 600 LEVNCITILLGENHGVNIIKELPIEVTWVCCRRTPPTTQSELDSDLC 649
 IIIII IIIIII IIIIII IIIIII IIIIII IIII II.III:II
 592 LEVNCILLGENHGVNIIKELPIEVTWVCCRRTPPTALSEVDSLDIH 641
 650 DIELTEKPHVDLCEFCSSSEDPVLTAMTAGQSTEEVQAPLAWTEAGIQ 699
 I:IIIII:IIIII IIII III.II I.II:II IIIIII
 642 DIELTEKPHIDLCEFCSSSEDPMLAMSDVDQNAEIIQTPLAWTEAGIQ 691
 700 IIIMLEKSGKLGFSILDYQDPIDPASTVIIIRSLVPGIAEKDGRLLPGD 749
 I IIIII:IIIII IIIIII IIII:IIIII IIIIII IIII
 692 AIELEKSGKLGFSILDYQDPIDPANTVIVIRSLVPGIAEKDGRLLPGD 741
 750 RLAFVNDVNLNSSL EEAVALKCAPSGTVRIGVAKPLPSPEEGYVSAK 799
 IIIIII:IIIII.IIIIII IIII IIIIII IIIIII IIIIII
 742 RLAFVNDINLENSTLEEAAVALKCAPSGTVRIGVAKPLPSPEEGYVSAK 791
 800 EDSFLYPHPSCEAGLAKPLPRADIALVCTNDADLVDESTFESPSPEN 849
 II.II II.II II.II IIIIII:II:II III III:II:I
 792 EDTFLCSPIHCKEGLSKALPRADIALIDTPDAESVAESRFESQFSPDN 841

[illegible]

FIG. 23

1750 FVSDIVKGGIADPDGRLIQGDQILLVNGEDVRNASQEAVAALLKCSLGTV 1799
||||||| |||||:|||||||

1734 FVSDIVKGGIADADGRIMQGDQILLVNGEDVRNATQEAVAALLKCSLGTV 1783

1800 TLEVGRKAGPFHSERRPSQTSQVSEGLSSFTPLSGSSTSESLESSSK 1849
||||||| |||||||:||||| ||||| | || |||| |||||

1784 TLEVGRKAAPFHSERRPSQSSQVSESSLSSFSLPRSGIHTSESSESSAK 1833

1850 KNALASEIQGLRTVEIKKGPTDSLGISIAGGVCSPGDPVIFIAAHPTG 1899
||||||| |||||:||||| |||||||

1834 KNALASEIQGLRTVEIKKGPADALGLSIAGGVCSPGDPVIFIAAHPTG 1883

1900 VAAQTQKLRVGDRIVTICGTSTEGMHTQAVNLLKNASCSIEVQVAGGD 1949
||||||| |||||||:|||||||:|||||||

1884 VAAQTQKLRVGDRIVTICGTSTDGMHTQAVNLLKNASCSIEVQVAGGD 1933

1950 VSVVTGHHQEPASSLSFTGLTSTSI FQDDLGPQCKSITLERGPDGLGF 1999
||||||| || |. |. |||||.. || ||||| |. |||:|||||||

1934 VSVVTGHHQELANPCLFTGLTSSITFPDDLGPQCKSITLERGPDGLGF 1983

2000 SIVGGYCSPHGDLPIYKTVFAKGAASEGRLKRGDQIIAVNQSLEGVT 2049
||||||| |||||||:|||||||

1984 SIVGGYCSPHGDLPIYKTVFAKGAASEGRLKRGDQIIAVNQSLEGVT 2033

2050 HEEAVAILKRTKGTVTLMVLS 2070
|||||||

2034 HEEAVAILKRTKGTVTLMVLS 2054

FIG. 24

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1

PDZ-A RHVEVFELLK .PPSGGLGFS VVGLRS.... .ENRGEL.GI FVQEIQEGSV
 PDZ-B QHMETIEL.V .NDGSGLGFG IIGGK..... .ATGV IVKTILPGGV
 PDZ-C SETFDVELTK .N.VQGLGIT IAGYIG.... .DKKLEPSGI FVKSITKSSA
 PDZ-D YEIVVAHVSK FSSENSGLGIS LEATVGGH.. .FIRSVLPEGP
 PDZ-E AGIQHIMLEK .G.SKGLGFS ILDYQD.... .PIDPASTVI IIRSLVPGGI
 PDZ-F SFERTINIAK .G.NSSLGMT VSANKDGL.. .GM IVRSIIHGGA
 PDZ-G NQPRRVELWR .EPSKSLGIS IVGGRCMGSR LSNGEVMRGI FIKHVLEDRP
 PDZ-H GELHMIELEK .G.HSGLGLS LAG..... .NKDRSRMSV FIVGIDPNGA
 PDZ-I KNVQHLELPK .D.QGGLGIA IS..... .EEDTLSGV IIKSLTEHGV
 PDZ-J GCETTIEISK .G.RTGLGLS IVG..... .GSDTLLGAF IIHEVYEEGA
 PDZ-K CDTLTIELQK .KPGKGLGLS IVGKRN.... .DTGV FVSDIVKGGI
 PDZ-L QGLRTVEMKK .GPTDSLGIS IAGGVG.... .SPLGDV.PI FIAMMHPTGV
 PDZ-M PQCKSITLER .GP.DGLGFS IVGGYG.... .SPHGDL.PI YVKTVFAKGA

97

51

PDZ-A AHRDGRKLET DQILAINQQA LDQTITHQQA ISILQKAKDT VQLVIAR
 PDZ-B ADQHGRLCSCG DHILKIGDTD LA.GMSSEQV AQVLRQCGNR VKLMIAR
 PDZ-C VEHDGRIQIG DQIIAVDGTN L.QGFTNQQA VEVLRHTGQT VLLTLMR
 PDZ-D VGHSGKLFSG DELLEVNGIT LL.GENHQDV VNILKELPIE VTMVCCR
 PDZ-E AEKDGRLLPG DRLMFVNDVN L.ENSSLEEA VEALKGAPSG TVRIGVA
 PDZ-F ISRDGRIAIG DCILSINEES TI.SVTNAQA RAMLRRHSLI GPDIKIT
 PDZ-G AGKNGTLKPG DRIVEVDGMD LRD.ASHEQA VEAIRKAGNP VVFMVQS
 PDZ-H AGKDGRLLQIA DELLEINGQI L.YGRSHQNA SSIKCAPSK VKIIFIR
 PDZ-I AATDGRLLKVG DQILAVDDEI V.VGYPIEF ISLLKTAKMT VKLTIHA
 PDZ-J ACKDGRLLWAG DQILEVNGID L.RKATHDEA INVLRQTPQR VRLTLR
 PDZ-K ADPDGRLLIQG DQILLVNGED VR.NASQEAV AALLKCSLGT VTLEVGR
 PDZ-L AAQTQKLRVG DRIVTICGTS T.EGMTHQQA VNLLKNASGS IEMQVVA
 PDZ-M ASEDGRLLKRG DQIIAVNGQS L.EGVTHEEA VAILKRTKGT VTLMVLS

FIG. 25

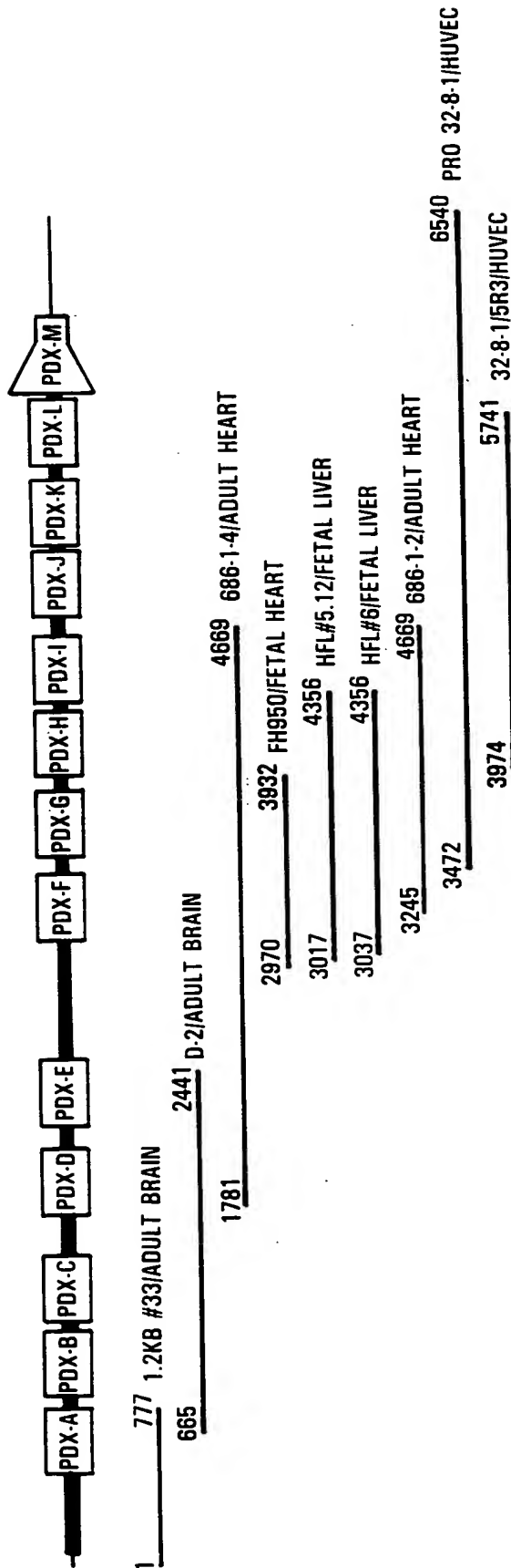


FIG. 26